Claims

1. A method of preparing the dichloropropanols 1,3-dichloro-2-propanol and 2,3-dichloro-1-propanol by hydrochlorination of glycerine and/or monochloropropanediols with gaseous hydrogen chloride with catalysis of a carboxylic acid, characterized in that said hydrochlorination is carried out in at least one continuous reaction zone at reaction temperatures in the range of 70-140 °C and with continuous removing of the water of reaction, the liquid feed containing at least 50 % by weight of glycerine and/or monochloropropanediols.

2. The method according to claim 1, characterized in that the liquid feed contains 80-100 % by weight of glycerine.

3. The method according to claim 1, characterized in that the liquid feed contains, as the monochloropropanediols, 3-chloro-1,2-propanediol and/or 2-chloro-1,3-propanediol.

4. The method according to any of the preceding claims, characterized in that the catalysis is made with acetic acid.

5. The method according to any of the preceding claims, characterized in that the reaction is carried out at a temperature of 100-110 °C.

6. The method according to any of the preceding claims, characterized in that the removing of the water of reaction is made by distillation.

7. The method according to claim 6, characterized in that the distillation is carried out at a reduced pressure in a rectification zone linked to the reaction zone.

8. The method according to claim 6 or 7, characterized in that, together with the removing of the water of reaction by distillation, at least partial primary collection of the product dichloropropanols is made.

9. The method according to any of claims 6-8, characterized in that secondary collection is made, from which dichloropropanols and monochloropropanediols are recycled to the process.

10. The method according to claim 9, characterized in that the secondarily collected residual balance of the reaction mixture is subjected to distillation under reduced

pressure in order to separate the higher boiling waste products as the distillation residue and the dichloropropanols and monochloropropanediols, recycled to the reactor, as the distillate.

11. The method according to any of claims 1-6, characterized in that it is carried out in a cascade of continuous flow reaction zones wherein the water of reaction is collected, together with partial collection of the product dichloropropanols, by distillation, located always downstream the individual reaction zones of the cascade, and the distillation residue is fed into the next zone of the cascade.

12. The method according to claim 11, characterized in that the reaction mixture exiting from the last step of the cascade is subjected to a two-step distillation, wherein in the first step the water of reaction is separated together with the dichloropropanol reaction product as the distillate and in the second step the higher boiling waste products are separated as the distillation residue and the dichloropropanols and monochloropropanediols are separated as the distillate and are recycled back to the process, preferably into the first step of the cascade.

13. An apparatus for carrying out the method of any of claims 1-10, wherein the apparatus comprises a circulation reactor with external circulation, in which there is located a distillation device.

14. An apparatus for carrying out the method of claims 11 or 12, wherein the apparatus comprises a cascade of continuous flow reactors, in which there are distillation devices located downstream the individual steps of the cascade.

15. The apparatus of claim 14, wherein the number of the members of the cascade is 1 to 5.

16. The apparatus of claim 14 or 15, wherein the number of the members of the cascade is 3.